

#### UNITED STATES OF AMERICA



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WASHINGTON, D.C.







OF THE

## City and County of Mew-Pork,

EXPLANATORY OF THE

CAUSES AND CHARACTER

ASHINOTOH, D. C., U.S.

OF THE

# EPIDEMIC FEVER,

WHICH PREVAILED IN

### BANCKER-STREET

AND ITS VICINITY,

IN THE

SUMMER AND AUTUMN OF

1820,

PUBLISHED BY ORDER OF THE SOCIETY.

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Ar a Stated Meeting of the Medical Society of the county of New-York, held on the 13th day of November, 1820, the Report of the "Committee appointed" at a Special Meeting held on the 2nd day of October, "to inquire into the Causes and Character of the disease prevailing in Bancker-street and its vicinity," was read; and on Motion was ordered to lie on the table one fortnight; and that the Society adjourn to meet on Monday the 27th for the special purpose of considering this subject.

At a Meeting held conformably to adjournment the following

Report having been again read and approved;

On motion of Dr. Manley, Resolved, that the Report be published; and that Dr. Osborn, Chairman of the Committee on the above Report, and Doctors Pascalis and Tappen, the Secretaries of the Society be a Committee to Superintend the publication thereof.

Extract from the Minutes,

PETER C. TAPPEN, Secretary.

#### TO THE

## MEDICAL SOCIETY

OF THE CITY AND COUNTY OF NEW-YORK.

THE COMMITTEE APPOINTED TO INQUIRE INTO THE CAUSES AND CHARACTER OF THE DISEASE PREVAILING IN BANCKER-STREET AND ITS VICINITY.

#### RESPECTFULLY REPORT:

From the commencement of alarm, even previous to the appointment of this Committee, several of its members had been in the habit of visiting the cases of fever, as they occurred; and also of carefully examining the bodies of the dead.

It will be found, from the following topography of the infected district, that ample materials existed on that spot, for the generation of malignant fever. Although numerous cases of malignant fever, occurred in the adjacent streets, yet they were
 most frequent and most malignant in Bancker-street, from Pike, to Catharine-street, and in Lombardy-street on the side next to Bancker-street.

Bancker and Lombardy-streets run parallel to each other, and to the East River; distant from the river about six hundred and fifty feet, forming an inclined plane towards the river, at right angles to the inclination of the plane; naturally of sufficient elevation and possessed of every favourable circumstance for free ventilation and cleanliness; it required the cupidity of man to render it confined and filthy.

From the southern aspect of this district, its atmospheric temperature is somewhat increased; owing to the solar rays falling on its surface, by a greater angle of incidence, than upon an uninclined plane. The infected section is sufficiently elevated above, and properly descending towards Catherine and Market streets, to carry off the water, but owing to the great number and crowded state of the inhabitants, sufficient filth (though but a small proportion of the whole) is constantly thrown into the street, to impede the water; and instead of cleansing, even rain becomes an additional material of noxious exhalation.

The rear of the lots fronting on the south side of Bancker-street, is much below the street, rendering it impossible to get rid of the filth in any other mode than by carrying it into the street: this being seldom done, most of the lots and alleys retain the filth and water, and every article it may be necessary for such a crowded population to remove from their apartments. The manner in which the buildings are constructed, when taken into consideration, in connexion with the above described natural surface of the street and lots, will show additional difficulties for the escape of putrefying vegetable and animal exhalations. There are probably more than twice the number of houses, on a given number of square feet in Bancker street, than in any other part of the city. The buildings extend to the rear of almost every lot, the access to which, is by means of an alley about 3 feet wide.

Wherever any space is found not occupied with buildings, it, together with the alleys, is usually covered with every species of filth.

The influence of great atmospherical temperature, operating on the accumulated filth of the above district, may be readily conceived, on a population more crowded, it is believed, than can be found in any other city of the United States.

In this confined and unwholesome district, there are about 80 lots of from 20 to 30 feet wide, and from 100 to 200 feet deep; about 20

of these lots, on the north side of Bancker-street, are occupied by tolerably neat and comfortable buildings, tenanted by about 40 families (197 individuals) living decently; the remaining 60 lots are covered with buildings entirely constructed of wood, (with a few exceptions of brick fronts) one and two stories high; mostly old and decayed; seldom more than one small window to a room.

From the cellar to the garret of these badly constructed, decaying, and ill ventilated houses, are to be found, numerous families, in the most filthy state imaginable, destitute of almost every article of household furniture, and literally, so full of inhabitants, as not to allow space for the necessary articles of housekeeping.

Between 50 and 60 of the rooms fronting on Bancker-street, are occupied as dram-shops; the upper rooms and back buildings are let, by those who hire them of the landlord, to an inferior class of tenants, these again let apartments for a week or a day, to others still more degraded than themselves. These apartments are never cleansed; and from being the haunts of drunkenness and debauchery, become loathsomely filthy within; and, out of doors, the offals of the apartments, and even the excrements of their bodies, being thrown into the alleys, (where all think themselves at liberty to deposit, but none feel it their duty to remove,) this filth, united with that produced by a

large number of hogs, presents a scene at once loathsome and nauseating.

Many apartments contain no other article, as beds, but straw or rags, thrown on the floor or ground; there trodden under foot, they become imbued with every kind of 61th, and in this state are suffered to rot in the apartments, or thrown into the alleys, there to undergo a more speedy putrefaction, and add to the general mass of contamination. The food of these people, though precarious, is probably seldom deficient; notwithstanding it is, when compared with drink, by them, considered of secondary importance, they frequently enjoy profusion, and while in health, generally appear to be jovial and contented.

In this section of Bancker-street, there are 1566 persons; they are mingled promiscuously in the same apartments; and frequently may be seen, as tenants in common, hogs and degs; blacks and whites of both sexes and various ages, from ten years old to fifty.

In August last, there were living in the before defined district of Bancker-street alone,

Individuals. On 30 lots 234 families, consisting in all of 1096 842 189 20 542 10 108 144 29 81 16

on this lot, which is No. 95, there are three small wooden buildings, and of those living there in August, 21 have died, and 12 or 14 been removed sick.

In Lombardy-street, one small lot, No. 54, with wooden buildings, is said to be occupied by 24 families, among whom there has also been great sickness and mortality. Since the commencement of the fever, exclusive of those who have died, many have been removed, and many fled from fear of the fever; consequently the population is now considerably reduced.

Dr. Arbuthnot, in his treatise on air, states, that 3000 human beings, living within the compass of one acre of ground, would make an atmosphere of their own steams about 71 feet high, in 34 days; which, if not carried away by winds, would become pestiferous.

Hence, living in crowded dwellings, in the vicinity of putrefying vegetable and animal matter, will inevitably dispose to malignant fever; and such causes and similar circumstances have existed in Bancker-street and its vicinity, and such have been the consequences.

It is admitted, the causes of malignant fever tire not always assignable to heat or cold, moisture or dryness; but it is well known that in either of these states, putrefying vegetable and animal matter may produce malignant fever, and to a certainty will produce it, in a heated and

confined atmosphere. In addition to which, it is well known, that rotten and decayed wood is capable of generating miasmata, if not more deleterious, at least as much so as animal putrefaction.

It is a well established and approved doctrine, that any epidemic, which controls all ages and both sexes, can impart its form, however dissimilar, to the ordinary diseases, or transfer those that are incident to ordinary causes, into the only prevailing affection; but this phenomenon requires a truly universal epidemic. It is from the same law of nature, that we may, by accurate observation, discover even during a tolerably healthy state of a large population, what danger, and what form of disease, will most likely prevail, when the atmospheric constitution is sufficiently aided by local causes. This inquiry, we find, excited the attention of several practitioners during the last summer and autumn, which elapsed, however, without any very remarkable degree of mortality in the city generally.

During the months of July, August and September, the range of the thermometer was higher than usual; as, during twenty-two days of July, it ranged from 80° to 90°; ten days of August from 80° to 93°; and nine days of September, from 80° to 88°. The atmosphere was more calm and dry than ordinary; remitting fever, cholera, and dysentery, prevailed to some ex-

tent, and caused considerable mortality, especially among children; in the latter part of August, and through September, these diseases were accompanied by catarrhal symptoms; catarrhal fever, and pneumonic inflammation were not rare.

In various parts of the city, remitting fevers of more than ordinary severity occurred, and in many instances assumed a character of malignity.

Throughout the United States, distant from, as well as on the sea coast; in the interior, as well as adjacent to tide water, remitting and intermitting fevers have prevailed, of more than usual severity, and occasioning more than ordinary and sudden mortality. As early as the latter part of July, there occurred several cases of sudden death from fever, which occasioned the suspicion of the commencement of fever of a malignant type, especially as many cases of simple continued fever, usually under the ready control of remedies, now began to assume a more uncertain and remitting type, and gradually took on, as the season advanced, a more bilious character. Common bilious or remittent fevers, attended with some degree or symptoms of malignity, had frequently been noticed, and several of them had proved fatal. One of our brethren, an eminent practitioner declares, he has seen malignant symptoms characteristic of yellow fever, in several instances of ordinary remittents; such as red suffusion of the eyes, yellowness of the skin, mordicant heat, hemorrhage, excruciating pain of the head, difficult and tedious convalescence, &c. &c. Another has informed us that cases of dysentery and cholera had exhibited abundance of petechiæ.

Another writes to us that an unusual number of febrile diseases appeared in the City Prison and Bridewell in July and August.

The principal physician in attendance on the Hospitals at Bellevue, affirms that, during the months of July, August, and September, and the early part of October, there occurred at that establishment, a disease exhibiting many characteristics of the Typhus Gravior, Jail or Hospital Fever, accompanied with bilious symptoms, especially among the blacks, such as yellowness of the eyes and skin, epigastric distress, in some instances so great as to render the slightest pressure intolerable.

It is on the same authority, and to illustrate the pre-existing causes of malignant fever, that your Committee notice the case of a black boy, whose great yellowness of the eyes, and other appearances, induced a magistrate to order the examination of the corpse, which, after all, offered only what the physician had previously pronounced: a violent "acute peripneumonia." In fine, one of your Committee certifies that an old

lady in the vicinity of Bancker-street, who, after exposure to great fatigue in a damp atmosphere, was struck with hemiplegia, and died on the 9th day of the complaint, after long coma: in this case appeared general yellowness of the eyes and body, black tongue and mouth, and black alvine discharges.

All these singular and unusual appearances, are confirmatory of the opinion of your Committee, that a predisposing general constitution to malignant disease has existed; requiring only local exciting causes to be developed.

Your Committee therefore, feel authorized to infer, that there has existed probably, adequate predisposing causes for the reproduction of those fevers, which are more peculiar to this climate when assisted by impure miasmatic exhalations; in the operation of the long continued and intense heat of the summer months, the stillness of the elements, the absence of showers and thunder storms, with a continual cloudless sky, during long days of unabated and refracted heat.

The first cases of Fever in Bancker-street were rapidly formed and observed by more than one physician; the first of which we shall take notice, was duly examined by a gentleman of much experience, and reported by him as malignant fever, on the 21st day of August: this was Phœbe Williams, an Indian half breed, she died at the old Almshouse on the fourth day of the

disease, and within a few hours of being able to walk about.

On the next day, Hannah Lewis, a coloured woman from No. 54 Lombardy-street died, on the sixth day from the attack; and on the following day, William Peck from 95 Bancker-street, expired, after having exhibited very severe malignant symptoms: In the first of these three cases, a vomiting of black matter took place, before death; and in the two last, both black vomiting and purging, and the corpse was mottled and covered with petechiæ.

From this period, the disease, which will be hereafter faithfully described, continued to rage in Bancker-street, from Catherine-street, including two blocks, up to Pike-street, till late in October.

Respecting the nature of the Bancker-street fever, your Committee are aware of many difficulties in the way of discrimination; owing to some peculiar circumstances connected with the disease, and because Medical gentlemen have promulgated, perhaps prematurely, an opinion different from that of the Committee. With the best motives and purest intentions, well-informed men are not always sufficiently guarded against erroneous conclusions; and lest we might ourselves incur the like danger, we will here state certain principles and characteristics, essentially appertaining to Typhus fever, by which it will after-

wards appear easy to define the species of disease now under consideration.

We should first, however, say, that of late years, the name of typhus, has been applied to very dissimilar fevers, by English and French writers. By them, the yellow fever is made an American Typhus; and the plague a Levantine Typhus. Cullen, Thomas, and others, not only make of the yellow fever, a variety of the order typhus; but they and other authors, embrace in the same, Jail, Hospital, and Camp fevers.\* It would perhaps be difficult to find fault with them, because the famous Sauvages, long ago, considered peripneumonia notha a Typhus; which the professor of the theory and practice of physic in this city, has defined peripneumonia typhodes.† Your Committee therefore need not bring forward more proofs respecting the confused, or erroneous application of the word typhus, as introduced and used in Medical language; since it is common to say of pleurisy, or any other inflam-

† Vide Hosack's appendix to Thomas's Modern Practice of

Physic.

<sup>\*</sup> For the essential character of these fevers, and their difference from yellow fever, or from ordinary bilious remittent, vide observations on the Diseases of the army, by Sir John Pringle, Bart. Do. on the Means of preserving the Health of Soldiers, and of conducting Military Hospitals, by Donald Monro, M. D. Do. on Jail, Hospitals or Ship fever, made in various parts of Europe and America, by Henry Robertson, M. D. Diagnosis, Acute inflammation of internal Membranes: formation of abscesses in the viscera, sometimes in the Lungs and Brain. Symptoms, continued type, eruptions, Hemorrhage, discharges of pus, &c.

matory disease, that it has, or will run into typhus. Your Committee infer therefore, that this
denomination has become synonymous with asthenic, or adynamic attributes; defining a certain
state of debility, which immediately requires an
exciting or stimulating mode of treatment.

The only mode of discriminating, therefore, between this and any other febrile disease of a different nature, will be, to fix upon the essential characteristics appertaining to two opposite kinds of morbid condition of the human frame; which, although they may frequently show many of the symptoms common to both, constitute however, two perfectly opposite diseases: such are typhus fever, and bilious malignant, or yellow fever.

Medical writers apprise us, that the first disappears in warm weather, that it is most prevalent during cold weather, more particularly if accompanied by humidity of the atmosphere, that the young and robust are the least liable to its attacks, whereas the old, and those debilitated from want of proper food and comforts of life, are its more general subjects; and that it is unexceptionably a fever of a continued type, of protracted and uncertain stages.\*

<sup>\*</sup> For the difference of typhus from yellow fever, vide Hosack's appendix to Thomas's Practice of Physic, page 834; on the essential character of the first, as a long continued type, and of the second as pestis tropicus, usually proving fatal in seven days, vide Hosack's Practical Nosology, page 189.

The word Typhus also from its etymology or Greek derivation, characterizes a state of stupor and suspension of the functions of the sensorium, and is generally accompanied by muscular irritability, perfectly characteristic of the disease it designates.

A very different and quite opposite series of essential and characteristic circumstances, denotes our ordinary bilious, malignant, remittent fevers, or yellow fever: even supposing for the sake of argument, that this should be considered a disease sui generis.

First, They have a remittent, or an intermittent type.

Secondly, Their progress is rapid and violent. Thirdly, They are expected never to break out, excepting during, or immediately following, the warmest season of the year: and frost always stops their progress, and puts an end to their existence as epidemics.\*

Fourthly, They attack the most robust, seldom the infirm, or those in the decaying stages of life.

Fifthly, They show three stages, one inflammatory, of thirty-six hours: one asthenic, and one

\* It is not by frost only that summer and autumnal malignant diseases are immediately checked as *Epidemics*, but also by the cold weather that precedes it; yet many sporadic cases of yellow fever have been seen and attended by eminent physicians, namely, by Rush, as late as November and December, during snowy and frosty weather. It is likewise inferred that infecting miasmata, when confined in warm dwellings, may gradually change their nature during winter, as much as the character of their congenia diseases into various kinds of Typhus.

a series of deadly symptoms, the forerunners of certain death.

These fevers may at any period exhibit peculiar bilious or yellow effusions, in the eyes, skin, or parenchyma of the liver; and in the stomach, the formation of dark brown or black matter: hence, black vomit.

From all this, your Committee feel authorized to class Bancker-street fever, in the last defined order of fevers: feeling satisfied that the facts and circumstances developed, together with the description of the disease, and the autopsic examinations will bear them out in the designation.

From the documents obtained by your Committee, it appears the number of blacks affected by the epidemic in Bancker-street and its vicinity, to the whites; is in the proportion of three of the former, to one of the latter; and among the blacks, the disease has certainly exhibited a greater degree of intense malignity and fatality.

This remarkable eircumstance has induced many persons to believe that, the Bancker-street fever having stricken those who were in fact, by far the most numerous inhabitants of that district, was nothing more than an ordinary fever, as it occurs in jails, camps or hospitals, or else, being a distemper peculiar to the African race and people of colour, it could bear no resemblance to the ordinary bilious remittents of our cities; and much less to the yellow fever.

Although the refutation of this opinion may be best effected by the description of the disease which is hereafter detailed; yet, it will not be irrelevant to mention, that the proverbial unsusceptibility of the blacks to yellow fever, exists only when they inhabit their native soil of Africa, or the West India islands; but by long residence in North America, they become subject to every disease in common with the whites. A great number of blacks died in Philadelphia of yellow fever during the epidemic of 1793. We are informed by Monsieur Deveze of Paris, who practised in Philadelphia during that calamitous fever, and also acquired much experience in relation thereto, in the West India islands; that the residence of blacks in cold countries soon wears away their unsusceptibility, and renders them eqally liable to yellow fever with the inhabitants of cold climates.\* A lamentable proof in point of the ready or renewed susceptibility of blacks long resident in, or natives of cold countries, is afforded in the recent event of the fatality of the climate to the emigrants from this city to Sherbrot in Africa.

pag. 109.

<sup>\*</sup> Vid. Traité dela fievre jaune par. J. Deveze D. M. P. &c.

<sup>†</sup> Extract from the London Missionary Magazine for August and September, 1820 (inserted in the Boston Recorder for November 4th, 1820.) "On the 20th of March, the Augusta reached Campelar, a small Island in Sherbro Bay, soon after the transhipment of the Colony Mr. Bankson, agent for the American Govern-

It has been objected or supposed that, many predisposing causes originating from poverty and want of food, might have occasioned the disease under consideration.

Your Committee cannot, however, reconcile that supposition, with the well known and obvious fact, that want of food is seldom or never (perhaps) felt, by any class whatever of the people of this city; especially in the summer and autumn.

They have also the testimony of an accurate observer; who has minutely inquired into the manners, and the modes of living of the blacks, in Bancker-street; and he is satisfied their only wants were, those of cleanliness and moral life.

It appears therefore that the principal causes of this fatal distemper are attributable to the localities, of extreme filthiness in crowded cellars and hovels, daily rendered more and more offensive, by impure human effluvia, and exposure to nightly chilness and moisture.

Doctors Hillary, Jackson, Hume, Dalrymple and all other esteemed authors on the yellow fever of the West Indies, as well as many of our own country, consider the particular dis-

ment, Dr. Clozel, a Physician, Mr. Townshend, a midshipman of the Augusta, a Rev. Mr. Bacon, six men and the boy who manned the Schooner died with a fever, (eleven whites) of the coloured people, fifteen died. Of the survivors, Mr. Daniel Coker, a molatto who accompanied the Colony as a free emigrant took charge, &c.

tinguishing symptoms of that disease to be; in the words of Dr. Hume; "Sickness and incessant yellow bilious, or black vomiting; attended with an oppression and pain about the precordia, particularly when the hand is placed on the pit of the stomach; laborious and painful respiration, vellow colour of the eyes and skin; though this is not a constant concomitant symptom." have the same authority for the following appearances on dissection; "of those who have died of vellow fever, the coats of the stomach, duodenum, and ileum, have been found commonly more or less inflamed and mortified, and full of black bile; the liver large and turgid with bile, and sometimes sphacelated, where it lies contiguous to the stomach; the omentum livid and full of black blood; at other times, few or no marks of inflammation have been observed on the stomach or contiguous parts, though the preceding fever had been attended by excessive vomiting."

Such have been the distinguishing symptoms, and such has been the result of autopsic examinations generally, in the fever which is the subject of our investigation.

In all cases, every symptom did not occur, but in all, some of the distinguishing symptoms did exist; and the autopsic exhibition has been precisely the same as the above named and other esteemed authors led your Committee to expect.

The sick were generally attacked with a sense of chiliness, weakness and pain in the head and loins (and in some instances great pain of the bones) sickness at stomach and thirst, great heat of the stomach, and a sensation of soreness and uneasiness over the whole surface, in some cases the pulse strong and full, in others full and soft, seldom hard; in some, considerable heat of skin, great anxiety about the precordia, a short oppressed and interrupted breathing; these symptoms were usually succeeded on the second and third day by great pain in the epigastric region, the tongue which in the first stage was sometimes dry and white, was now moist, covered with a thick white or brown fur, and in some instances there was a slight redness of the centre and great redness of the edges; the eyes suffused with a red, or watery appearance, which as that of the countenance, was like an intoxicated person; the face being flushed with an expression of wildness and anxiety, more than of acute pain; nausea, and vomiting of green bilious matter usually took place at the onset of the disease, with frequent stools of green copperas coloured water, the vomiting increasing in violence, as the disease progressed as also in frequency; and an increase of soreness in the epigastric region to that degree as to occasion exclamations of extreme pain, or excite vomiting

on the slightest pressure of the hand on the pit of the stomach.

In many cases the pain of the head extended from the forehead to the occiput and down the neck; in others it was confined to the forehead and eyes; and in these the pain was most severe.

The symptoms of excitement were various in their duration; but generally, on the second or third day at farthest, they were succeeded by collapse and extreme exhaustion; the pulse often became slow and feeble; in some scarcely perceptible, in others intermitting; and in a greater number a total subsidence of heat and irritation of the skin.

In some cases, so great an abatement of all the symptoms previously existing, or absence of those anticipated, occurred on the third or fourth day, as to give fallacious hopes of safety to the patients and their friends; but this suspension of alarming symptoms was soon followed by others still more so, such as violent vomiting and deficiency of vital heat, over the whole body; sometimes attended with an enlargement and redness of the vessels of the tunica albuginea; and yet as stated by a competent observer, "the loss of muscular power was by no means proportioned to the actual severity of the other symptoms;" to use his own words "I say actual severity, for the symptoms were oftentimes by no

means discouraging to the uninformed and unguarded observer, and yet would terminate quickly in the death of the patient;" previous to which, there usually occurred a cold clammy sweat. On the second, third, or fourth day, the urine was tinged with bile, which also exhibited itself in the discharge from blistered surfaces, and in the adnata of the eyes; at the same time, or sometimes not till the fith day; the skin became tinged yellow, so conspicuously as to be plainly perceptible in blacks, communicating the same tinge to their dark rete-mucosum. Violent delirium took place but in few cases; the sensorial faculties generally remained unimpaired; so that the sick were enabled to detail a clear and distinct account of the manner of attack, and the progress of their disease, even a very few hours previous to dissolution.\*

In those cases which terminated fatally, there generally appeared about the fifth or sixth day, petechiæ or hemorrhage; sometimes the hemorrhage was from the mouth, at others from the nose, stomach, or intestines; hiccough often at-

<sup>\*</sup>In the Southern Patriot, we have lately read a well written and detailed account of the malignant fever which has during the warm season, caused such unexampled mortality in that ill fated city. The medical author of it offers it as a subject of investigation; in as much as it appeared to differ in the succession of symptoms from the yellow fever of other places; and yet has presented its most essential characters. The reader may now compare the subject of this report to the epidemic of Savannah, and he will feel convinced of the similarity of the two diseases.

tended the last stage for twenty-four hours preceding death; and a vomiting of dark, bilious matter, frequently of a brownish black colour. From the total want of conveniences in the habitations of the sick, it was but seldom practicable to procure a sight of the matter ejected or dejected; the whole of their bedroom furniture seldom supplying more than one vessel for the use of the sick, and that one appropriated at different times to various uses, as necessity might demand. The matter of black vomit has been witnessed by many of your committee.

In some cases, the first attack was extreme exhaustion, without any preceding excitement; in others it was hardly admitted by the sick, or their companions, that they were at all sick, walking about as in health to within a few hours of death.

The symptoms of the disease in those persons who were taken from Bancker-street to the New-York Hospital, during the month of September, (at which time they came under the observation of one of your committee) differed somewhat from the preceding account, assuming, in most cases, a character of bilious remittent fever.

It may be proper here to remark, that those cases generally removed from the infected district, soon after the onset of the fever, and where there appeared any prospect of recovery,

were much subdued in malignancy by the removal. A pure air and good attendance as to nursing and comforts, securing a much greater proportion of recoveries than among those who remained.

At Powles Hook there occurred two cases of Bancker-street fever. These were, two black men who resorted to Bancker-street; had occasionally lodged there, and had lost some relatives by the disease. It is stated by Dr. Hornblower, who has had much experience in yellow fever, that both these cases put on every required distinguishing mark of yellow fever. One died on the fifth day, the other recovered.\*

It is averred by one of the gentlemen who attended Mr. King, the victim of Philadelphia fever, at our Quarantine Hospital, that one of the above stated cases showed as strong, and precisely the same symptoms of yellow fever, as were exhibited in the case of Mr. King. At the time of his witnessing the case at Powles Hook, Mr. King's case was fresh in his memory, it having taken place but a few days subsequent to Mr. King's.

Of 28 cases reported to the Resident Physician, to the Mayor and to the board of health, by a

<sup>\*</sup> The committee have been put in possession of the description of a case of fever, by Dr. Thomas W. Blachford, which occurred in Jamaica, L. I. and originated in Bancker-street, similar to those of Powles Hook. The patient died on the 6th day, with black vomit.

single physician as Malignant fever, or suspicious, 5 had that peculiar black matter known to distinguish the most malignant grade of yellow fever, and universally called black vomit, either thrown up during life, or detected in the stomach after dissection; 9 had yellowness of the skin; 7 hemorrhage; 4 petechiæ, and 4 hiccough. The hemorrhage was frequently from the intestines, but oftener from the mouth and nose. The matter of black vomit was witnessed by some of your Committee in many living subjects, and detected in several others on dissection. The subjects were generally in the prime of life, of robust plethoric habits, most of them from 30 to 40 years of age, some younger, few older, and in few or no cases appeared any marks of emaciation after death. It has been long since aptly said, that malignant fever is a dog that bites without barking, as frequently proving fatal, without appearing from any violence of symptoms to indicate danger; this has been especially the case in Bancker-street fever, as in; many instances the patients have been unwilling to acknowledge themselves sick, and have actually walked the street till within a very few hours of dissolution, and many indeed to appearance, were able to dig their graves the day of their deaths. Such has been the character of Bancker-street fever.

A number of bodies were examined by your Committee, as also by many other Medical

Gentlemen. From six communications detailing the exhibition, the following description is selected as having been drawn up by a gentleman who attended most of the dissections in the infected district, in all points agreeing with other communications as well as with the observations of your Committee:

"An inflamed state of the omentum, which was frequently congested with blood; paleness of the liver, which in several instances put on a mottled appearance with spots of a pale yellow or brick colour; the gall bladder almost universally contained dark viscid bile of the colour and consistence of tar. The stomach however showed more particularly the marks of derangement; the inner or villous coat was highly inflamed, easily abraded with the finger, and interspersed with spots of a dark colour; the external surface generally sound and seldom marked with any high The intestines, pardegree of inflammation. ticularly the duodenum, jejunum and ileum were frequently found in an inflamed state, and were also marked, with gangrenous spots; the mesentery often partook of their inflamed state. The stomach in many cases contained a dark brown matter, with black specks swimming in it, the true coffee-ground like matter of black vomit. The spleen was generally found much enlarged in an extremely soft friable state, easily broken down by the grasp of the hand."

To the state of things related above, the attention of the Board of Health was solicited as early as the 7th of September; in a letter addressed to the President, informing him, of the fact, that malignant fever prevailed to an alarming extent in and about Bancker-street. He was apprised that a formal petition to the board was contemplated, to induce it to a speedy exercise of its authority in the furtherance of such measures as alone appeared to promise security to the neighbourhood; and which measures, it was supposed were a primary motive in the Institution of a board of health; viz. The removal of the sick and cleansing of the infected district. An entire and exclusive confidence in the Resident Physician was deprecated as impolitic and unjust; in as much, as it was well known that he earnestly contended for the exclusive, foreign origin and importation of malignant fever, and it was asked "whether under such impressions and the existing circumstances of Bancker-st: he would be willing to admit the existence of a malignant type of fever unequivocally of a domestic origin." It was particularly urged that some respectable and experienced member of the Medical faculty, not wedded to those opinions entertained by the Resident Physician respecting fever, a gentleman in whose integrity and ability of discrimination, full reliance could be placed, should be associated with him, to investigate the epidemic of Bancker-street and its vicinity. It was moreover requested on the ground of reciprocity, as such privilege had been repeatedly claimed and obtained by the contagionists; and as an additional reason why such course would be both politic and just was urged, "the frequent misnomers and mistakes in regard to malignant fever, as instanced particularly in the contested cases of John and George Van Nest, Mr. Conrey, John C. Williams," &c. &c.

That these reasonable demands were not heeded may be accounted for in the well known fact: that the resident physician has selected and held up in derision to public view, and sneeringly branded with the epithet "Yellow Fever of Bancker-street; the minor grades of fever,' 'the common every day occurrences of our City;" while cases of a decidedly malignant character have been no less artfully concealed from so public an exhibition; and a long and lingering disease, originating from a different cause, and distinguished by a totally different train of symptoms, a fever generated in a cold and extinguished by a hot temperature, has to the repugnance of reason and common sense, been called in to account for a mortality unprecedented except in epidemic periods; and the epidemic fever of Bancker-street has by these Gentlemen of authority been denominated " Typhus Fever."

That the constitution of the atmosphere com-

municated a disposition to the ordinary remitting and other fevers to assume a malignant character, having been above noticed, it is thought proper here to state, what is also a well known and invariably recorded fact, that simple remittent, bilious remittent, and intermittent fevers, often prevail in an infected district, and even in the same family, where yellow fever exhibits its greatest malignity.

It appears, from the best information your Committee can obtain, that about 150 died of Bancker-street fever from the 21st day of August to the 20th day of October: whereas, when alarm was excited at home, and dread spread abroad, during the existence of malignant fever in the autumn of 1819, only from 40 to 45 died of that disease, out of 66 well ascertained cases.

In fine, as to the denomination of the disease, the causes and character of which has been the subject of your Committee's investigation, we do not hesitate to declare our conviction of the indentity of Bancker-street fever, with the malignant fever of authors from Hippocrates to the present day, and the yellow fever of tropical climates and our own harbours; and that this fever varies only, in degree of malignity, intensity, and extensiveness of operation, proportioned to local exciting causes.

Having thus presented to your view, the result of, and opinions deduced from, an arduous and laborious investigation; having accurately described the malignant fever of Bancker-street, its causes and effects, your Committee deem it not transcending their duty, in endeavouring to point out by what preventive measures (in their opinion) the recurrence of the like dangerous distemper can be best guarded against. It is decmed a duty more imperious as, from this year's experience, it may be inferred, that many circumstances of weather might have extended the ravages of disease, and rendered it universally operative.

We deprecate the idea, that human wisdom has no power to arrest or modify the deleterious influence of atmospheric vicissitudes and temperature. These, with a blast, can create desolating pestilences, and by a different quality and degree, suddenly put an end to their deadly sway. If, providentially, such changes take place, and they can be depended upon to guard many nations from total destruction, it cannot be otherwise than by those beneficial qualities of the air, which it is in our power to define, to analyze, and even artificially to create, by cleanliness, ventilation, and the removal of all putrid and offensive materials.

We must be permitted, on this occasion, to remark, although with regret, that those preventive measures which had been so wisely devised and liberally provided for, by the municipal au-

thorities of the city of New-York, during the last season, have been so unaccountably neglected in Bancker-street and its vicinity; and this is the more wonderful and more to be lamented, as at an early period of the season, the filthiness, immorality and wretchedness of the people in that district had been the subject of formal inquiry and presentment by the Grand Jury of the County of New-York. Besides those evils within the perview and completely under the control of the Corporation, there are others in the same district, for the correction of which your Committee are aware that no sufficient legal power exists in the local authorities; but let us hope that an enlightened legislature will not overlook them, if the principal magistrate and the aldermen, who are constituted the guardians of the health of the city, can eventually be induced to give all due attention to every domestic source of dangerous disease.

1. The first of these evils is the want of a proper declivity in the lots of the south side of Bancker-street,—As this district is part of a more extensive one, forming an inclined plane towards the river, it is obvious that the abovementioned lots require more filling up in the rear, to give declivity enough to convey water into the street. Supposing this should be sufficient in some places, yet the lots being so crowded with miserable frame buildings, and most of

the alleys and yards not being paved, it follows, that the cellars under the front houses must be the receptacles of an immense quantity of filtered human filth in substance or in vapour, for the diminution of the deadly effects of which, vegetable absorption (in all such circumstances so important,) is here altogether wanting. In the whole district, neither herb nor shrub grows.

Your Committee, however, believe, that the existing Corporation laws respecting the internal regulation of lots on paved streets, if duly attended to and executed, in this part of the city, would correct, in a great degree, these unwholesome circumstances.

2. The second evil, or source of dangerous miasmata in this district, is the crowded mass of old frame buildings, facing each other from one lot to the other, closed up by the front houses, and by the adjoining houses and fences of the lots of Lombardy-street in the rear: thus each dwelling is deprived of ventilation, amidst multiplied sources of decayed and mouldering materials, which in common philosophy, are of the same nature as the hold of a ship, which, without cargo, with only stone ballast and water, can by continued heat, generate pestilence; but how much more aggravated, as has already been said, must the situation of the same become by the addition of an extraordinary number of human be-

ings and other animals, continually assembled in their rags and filth?

In populous cities it is true there must be some place of resort for a proportionate number of people of that description, who seek not for comfort, but struggle for existence, for which they only provide the means from day to day. It is for this description of persons that speculating landlords multiply small houses, on any circumscribed space of ground; rendering it thereby more productive than if covered by the richest produce of the earth; and what still more increases the avails of this species of property, is, that no motive of pride or improvement, imposes the necessity of the most trifling expense in repairs.

Let us to this explanation add; that whoever has the task of husbanding this species of property cannot, by simple induction, perceive that he is himself guilty of a dishonest and immoral stewardship. Therefore it is, that in such cases, public authority should be exercised against causes injurious to the health and moral habits of large portions of the community, and subversive of public welfare. For the preservation of life, a good police should assume as much care and right in the inspection of the habitations of men on the land, as the Admiralty of all civilized nations attributes to itself, of defining habitations on the ocean to be, or not to be sea-worthy.

This is a principle to which one of your Committee has already invited public attention, and we subscribe to his declaration; "that it is the right and duty, of a Board of Health to denounce, or interdict any house, as a dwelling, which in point of space or locality is deprived of conveniences for cleanliness, and ventilation in Summer; or in a condition not to afford protection against inclement weather in Winter."

Such a provision once obtained for our municipial authorities would break up and disperse those infectious and immoral assemblages of people of all colours, ages, and sexes, from their common haunts of vice and disease, filth and idleness, where the cupidity of avaricious landlords not only arrests local improvement; but in fact, contributes more than the elements to the creation of pestilence.

3. The Committee will in a few words, trace a third evil to the defective organization of the Board of Health.

Our institution and others of the same kind throughout the whole world are misnomers of what they should be. As in times of old, they are scarcely any thing more than Quarantine officers or interposing authorities against the introduction of foreign ships, men and merchandise, their only supposed vehicle of pestilence: but of the winds, temperature, seasons, and all other sources of home engendered disease, our

health laws have till recently said nothing, and now but little.

Contagionists cannot and do not suppress the smile of contempt at the absurdity of prohibiting the entrance of a person in perfect health, into our City, who has not been within miles of the pestilential district, nor seen a person capable, even in their own imaginations of affording the seeds of human contagion, when at the same time the Board of Health send their agents abroad to inquire into the circumstances of imported pestilential disease in ships and at the bedside of the sick where, according to their belief, the disease is communicable to nurses and others; and yet without purification or restriction they admit these agents to free intercourse with the citizens.

Trusty citizens therefore, of any profession or occupation, are adequate to the task of executing this kind of health-law:—But it has happened in our time, and especially in this country, that the health-laws embrace not only the task of excluding from our harbours and cities, all possible foreign means of infection, or as some are pleased to say, all seeds of human contagion; but also, all presumable domestic sources of pestilential fevers. Our own fellow citizens are so universally intent on the faithful discharge of this systematic double plan of preventive measures, that, in it alone, they place an implicit confidence for the safety of their lives. If our Boards of Héalth, therefore should

not be sufficiently guarded against errors of opinion in one or other extreme of opposite theories; or if they do not consist of a majority of minds professionally guided by a proper degree of diffidence in controverted doctrines of medical philosophy, they will be led into measures, false and absurd. They will either slumber in the confidence of safety, while natural causes may bring forth the scourge of pestilence; or they will combat the enemy, under imaginary forms; exciting alarm, terror, dismay and ruin, to the community at large, committed to their care.

From this candid exposition of the estimation in which your Committee hold the present organization of Boards of Health, you may anticipate our unanimous declaration, that an efficient Board of Health should consist of a majority of Physicians, for which purpose, the nonmedical members might be reduced so as to leave the Board consisting of the present number, under the presidency of the Mayor; the medical members to be appointed annually by some competent authority; and should this Society approve this plan of reform, no doubt is entertained, that it will obtain the warmest interest and support of the state Medical Society, and the ready sanction of the Honourable Legislature.

The more important the various subjects now offered to the consideration of this Society by

your Committee, the greater is our duty to acknowledge the obligations we are under to nineteen medical gentlemen, for the circumstantial and valuable documents, they have favoured us with, many of which, required great attention and labour on the part of their authors; and none of which, have been wanting in judicious remarks or well-observed facts. This Committee, sensible of the meritorious zeal with which every one of those gentlemen has endeavoured to assist and concur in the beneficent view of this respectable body, beg leave to tender them their most unfeigned and respectful thanks.

November 13, 1820,

SAMUEL OSBORN, FELIX PASCALIS, JOHN WATTS, Jun. JNO. NEILSON, THOS. COCK, CHARLES DRAKE, ANSEL W. IVES,

Committee.





